

Amendments to the Claims

This listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (Cancelled)

Claim 2 (Withdrawn) An improved vehicle suspension system in which a conventional suspension system comprises an upper and a lower suspension arm, an upper and lower ball joint, each comprising a spindle having included tapered openings whereby the improvement comprises the steps of :

Detaching the spindle from the upper and lower ball joint;

Detaching the upper and lower ball joints from the upper and lower suspension arms;

Installing a Hime joint including an annular shaped socket encasing a freely movable ball shaped member having an included opening therein into the location previously occupied by the ball joint attached to the upper and lower suspension arm;

Installing an upper and a lower tapered insert into the included opening of the ball shaped member and securing the upper and lower inserts with a bolt that passes through the upper and lower tapered inserts;

Installing the tapered lower insert into the upper and lower included tapered openings of the spindles thereby enhancing the vertical and horizontal travel of the suspension system.

Claim 3 (Cancelled)

Claim 4 (Cancelled)

Claim 5 (New) An improved vehicle suspension system comprising:

A two piece tapered insert having an upper and lower tapered insert;

an upper suspension arm;

a lower suspension arm;

a steering knuckle having an upper spindle including a tapered opening and a lower spindle including a tapered opening;

a first joint comprising an annular shaped socket secured by attaching means to the upper suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket, an upper tapered insert and a lower tapered insert which are mounted and secured within the included opening of the ball; whereby the lower tapered insert cooperates with the tapered opening of the upper spindle to attach the first joint to the steering knuckle.

a second joint comprising an annular shaped socket secured by attaching means to the lower suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket, an upper tapered insert and a lower tapered insert which are mounted and secured within the included opening of the ball; whereby the lower tapered insert cooperates with the tapered opening of the lower spindle to attach the second joint to the steering knuckle,

so that the upper suspension arm, the first joint including the first tapered insert, the upper spindle, the lower suspension arm, the second joint including the second tapered insert, the lower spindle and the steering knuckle cooperate to form an improved suspension system.

Claim 6 (New) The first and second lower tapered insert of Claim 5, whereby the slope of the taper can be varied to accommodate various spindle tapers.

Claim 7 (New) An improved vehicle suspension system comprising:

A steering knuckle, including a first and second spindle;

an upper suspension arm;

a first and second joint;

the first joint comprising an annular shaped socket secured by attaching means to the upper suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket, an upper tapered insert and a lower tapered insert

which are mounted and secured within the included opening of the ball; whereby the lower tapered insert provides attaching means to the first spindle;
a lower suspension arm;
the second joint comprising an annular shaped socket secured by attaching means to the lower suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket, an upper tapered insert and a lower tapered insert which are mounted and secured within the included opening of the ball; whereby the lower tapered insert provides attaching means to the second spindle;
in combination the upper suspension arm, the first joint, the first spindle, the lower suspension arm, the second joint, the second spindle and the steering knuckle form an improved suspension system.

Claim 8 (New) The lower tapered inserts of Claim 7, whereby the slope of the taper can be varied to accommodate various spindle tapers.

Claim 9 (New) An improved vehicle suspension system comprising:
A plurality of two piece tapered inserts, each having an upper and lower tapered insert;
a first joint comprising an annular shaped socket secured by attaching means to an upper suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket having an upper and a lower insert mounted and secured within the included opening of said ball;
a second joint comprising an annular shaped socket secured by attaching means to a lower suspension arm; a freely movable ball shaped member with an included opening in the center encased within the socket having an upper and a lower insert mounted and secured within the included opening of said ball;
whereby the lower tapered insert of the first and second two piece tapered insert is used to attach each joint to a steering knuckle so that the upper suspension arm, the first two piece tapered insert and joint, the lower suspension arm, the second two piece tapered insert and joint, and the steering knuckle form an improved suspension system.

Claim 10 (New) The lower tapered inserts of Claim 9, whereby the slope of the taper can be varied to accommodate various spindle tapers.